

NIVA workshop on Biomonitoring in occupational health practice (6008)

6-7 September 2010, Hanasaari Cultural Centre, Espoo (Helsinki area), Finland

In connection with the Eight International Symposium on Biological Monitoring in Occupational and Environmental Health (ISBM 2010) 6-8 September 2010.

Programme Draft (version 20 April 2010)

Check the final programme for session rooms and possible updates on the presentation times in August 2010.

Monday, 6 September 2010

08.00– Registration and information

09.00 Opening Plenary

Chair: Tiina Santonen, Finland

Opening address: **Finnish Institute of Occupational Health**
Harri Vainio, Director General

Opening address: **International Committee on Occupational Health (ICOH)**
Maurizio Manno, Chair of the ICOH Scientific Committee on Occupational Toxicology

Opening address: **Nordic Institute for Advanced Training in Occupational Health (NIVA)**
Mia Latta, Director

Opening address: **Institut National de Recherche et de Sécurité (INRS)**
Marie-Thérèse Brondeau, Head of Pollutants and Health Department

09.45 Opening keynote:
Environmental exposure assessment: collateral damage in the genomic revolution?
Christopher P. Wild, Director, International Agency for Research on Cancer (IARC), France

10:30 Coffee / tea break (30 min)

Session 1 (plenary): Biomarkers of exposure, effects and susceptibility

11.00 Keynote:
The use of biomarkers in occupational health research, practice and policy
Paul Schulte, USA

11.30 **Assessment of polycyclic aromatic hydrocarbon (PAH) exposure during pregnancy by measurement of levels of bulky DNA adducts in European mother and newborn child cohorts**
Lukács V., Anna L., Kovács K., Rudnai P., Schoket B., Hungary

11.45 **Occupational exposure in petroleum waste handling correlates with increased p53 protein stabilization in peripheral blood cells**
Jørgensen KM, Sulen A, Aumo L, Hjelle SM, Irgens Å, Øye OK, Aasen TB, Moen BE, Hollund BE, Gjertsen BT, Norway

12.00 **Elevated manganese affects mothers' and children's cognition.**
Menezes-Filho J.A., Novaes C.O., Paes C.P., Moreira J.C., Sarcinelli P.N., Mergler D., Brazil

12.15 **Single Nucleotide Polymorphisms Associated with Skin Naphthyl-Keratin Adduct Levels Among Jet Fuel Exposed Workers**
Jiang R., French J.E., Stober V.P., Kang-Sickel J-C.C., Nylander-French L.A., USA

12.30 Lunch (1h)

NIVA workshop

Biomonitoring in Occupational Health Practice

13:30 **Chemical exposure at workplaces**

Keynote:

The use of industrial hygiene and biomonitoring for risk assessment

Claude Viau, Canada

14.00 **Analytical methods for biomonitoring**

Keynote:

Analytical methods for biomonitoring – basic techniques, problems and solutions

Kate Jones, United Kingdom

14.30 **New methodological approaches in the practice of biological monitoring of exposure to volatile organic compounds (vocs) in mexican petroleum industry**

Mercado-Calderon F, Oropeza-Hernandez LF, Alvarado-Toledo E, Albores A, Mexico

14.45 **HPLC-MS/MS Method to Analysis Monohydroxy Metabolites of PAHs in Urine**

Huang C.F, Yan H.F, Pan Z.F, Dai Y.F, Niu Y, Wang Y.J, Zheng Y.X, China

15:00 Coffee / tea break (30 min)

Session 3
(plenary):

15.30–17.30

Theme:
NIVA work shop

AFSSET OEL Committee Guideline, for selection of biomarkers of exposure and construction of Biological Limit Values: example of toluene

Cointot M.L., El Yamani M., Brunet D., Nisse C., Pilliere F., Rambourg M.O, Stoklov M., Viau C., Bisson M., Binet S., Falcly M., Fastier A., Grimbuhler S., Haguenoer J.M., Iwatsubo Y., France

Biomonitoring study of shoe makers exposed to toluene in India

Verma, R, India

19.00 **Espoo City Reception at Karhusaari**

Tuesday, 7 September 2010

NIVA workshop

09.00 **Biomonitoring and exposure to metals at work**

Keynote:

Cadmium exposure in the glass industry

Mirja Kiilunen, Finland

09.30 **The Use of Biological Monitoring as an Exposure Assessment Tool for Stainless Steel Welders**

Morton J., Coldwell M, Keen C, Griffin P, United Kingdom

09.45	Workplace air quality and manganese blood levels for welders in Latvia <i>Martinsone I., Bake M.A., Rusakova N., Latvia</i>
10.00	Arsenic exposure in copper smelter <i>Pavela M.O., Finland</i>
10:15	Biomonitoring of occupational exposure to beryllium <i>Paul R., Germany</i>
10:30	Coffee / tea break (30 min)
11.00	Exposure to chemical cocktail: Firemen's chemical exposure <i>Laitinen, J., Finland</i>
11.15	Serum PCDD, PCDF and PCB Levels in Firefighters of Cohort 17 Years after the Fire at Cable Factory in East Siberia <i>Chernyak Y.I., Shelepchikov A.A., Brodsky E.S., Feshin D.B., Kolesnikov S.I., Grassman J.A., Russian Federation</i>
11.30	Occupational exposure to 4,4'-methylene-bis-ortho-chloroaniline (MbOCA) and isocyanates in polyurethane manufacture <i>Keen C Coldwell M MacNally K Baldwin P McAlinden J, Cocker J, United Kingdom</i>
11.45	Study Trends of Biomarkers in Occupational Exposure <i>Sottani C., Imbriani M., Comelli M., Minoia C., Italy</i>
12.00	Lunch (1h)
13.00	Biomonitoring and exposure to pesticides and industrial organic chemicals at work
	Keynote: Monitoring exposure to aromatic amines – selected examples from different occupational settings <i>Tobias Weiss, Germany</i>
13.30	Detection of polychlorinated biphenyls and polybrominated diphenylethers in blood serum of electricians and welders in Latvia <i>Sudmalis P., Bake M.A., Martinsone Z., Pike A., Latvia</i>
13.45	Determination of Operator Exposure Levels to Insecticide during Bait Applications in Olive Trees <i>Tsakirakis A., Tsatsakis A., Kasiotis K., Tsantila N., Arapaki N., Charistou A., Glass R., Macheria K., Greece</i>
14.00	1-hydroxypyrene in urine as a tool to evaluate the effect of an intervention to reduce the uptake of PAH from oils in engine rooms on ships <i>Nilsson R.I., Forsell K., Sweden</i>
14.15	Feedback and general discussion
14:30	Coffee / tea break (30 min)
Session 6a (parallel to session 6b):	Advances and new challenges in metal biomonitoring
15.00	Keynote: Low-level exposure to toxic metals – challenges for biomonitoring in risk assessment <i>Staffan Skerfving, Sweden</i>
15.30	Ethyl mercury in blood after long-term repeated exposure to thimerosal-containing vaccine <i>Barregard L, Elmberg L, Horvat M, Lundh T, Zachrisson O, Sweden</i>
15.45	Exposure and toxic effects of elemental mercury in gold mining activities in Ecuador. <i>Harari R, Harari F, Strömberg U, Broberg K, Gerhardsson L, Engström K, Chen C, Yu-Feng L, Ecuador</i>

- 16.15 **Arsenic Speciation in Urine using micro liquid chromatography-ICP-MS**
Leese E, Morton J, United Kingdom
- 16.30 **The influence of dietary habits on intra and inter-individual variability of urinary excretion of the different species of arsenic in Italian healthy individuals**
Lovreglio P., D'Errico M.N., Gilberti M.E., Drago I., Panuzzo L., Ferrara F., Apostoli P., Soleo L., Italy
- 16.45 **Elevated blood lead levels in recreational indoor-shooters**
Schierl R., Demmeler M., Mühle P., Nowak D., Germany
- 17.00 **Investigation of the biomarkers whole blood, plasma and urine for biological monitoring of occupational lead exposure: How precise are they?**
Nilsson J, Hedmer M, Lundh T, Nilsson L, Skerfving S, Bergdahl I.A., Sweden
- Session 6b**
(parallel to session 6a):
- 15.00 **Elevated postshift levels of 2-naphthol in rubber workers**
Gaultney B., Vermeulen R., Peters S., Talaska G., USA
- 15.15 **Levels of PCDDs, PCDFs and PCBs in breast milk samples from rural and urban area of central Poland**
Ligocka D., Kaminska J., Zielinski M., Jakubowski M., Poland
- 15.30 **The determination of terbuthylazine herbicide in hair as a marker of cumulative exposure**
Fustinoni S., Mercadante R., Polledri E., Bertazzi P.A., Italy
- 15.45 **Biological monitoring of indoor-exposure to dioxin-like and non-dioxin-like polychlorinated biphenyls (PCB) in a public building**
Schettgen T., Alt A., Keller D., Preim D., Kraus T., Germany
- 16.15 **Phthalate exposure during cold plastisol application**
Koch H.M., Haller A., Weiß T., Stork J., Brüning T, Germany
- 16.30 **Dermal exposure to polycyclic aromatic hydrocarbons in asphalt workers**
Fustinoni F.S., Campo C.L., Ciria C.P., Martinotti M.I., Buratti B.M., Longhi L.O., Foà F.V., Bertazzi B.P., Italy
- 16.45 **Pesticide biomarkers in Swedish populations**
Littorin M.E., Lindh, C.H., Amilon Å., Johannesson G., Assarsson E., Jönsson B.A., Sweden
- 17.00 **Biological monitoring of occupational exposure to antineoplastic drugs in French hospitals. Urinary cyclophosphamide, ifosfamide, methotrexate and alpha-fluoro-beta-alanine assay in health-care personnel**
Ndaw S., Denis F., Marsan P., France

19.30 **Symposium dinner**

Wednesday, 8 September 2010

Session 7
(plenary): **Biomonitoring in the risk assessment and management of chemicals**

- 09.00 *Keynote:*
Towards better chemical management – the role of biomonitoring in chemical risk management in Europe
Antti Karjalainen, European Chemicals Agency (ECHA), Finland
- 09.30 **A Framework for the development and application of biological monitoring guidance values.**
Levy L, Bevan R, Schoeters G, Smolders R, Smolders Angerer J, Sepai O, Jones K, Cocker J, United Kingdom
- 09.45 **Biological monitoring in occupational health practice - More than just a technique**
Heussen GAH, Verbist K, Netherlands
- 10.00 **Answering questions from occupational health professionals: an assessment of 5 years' of assistance in the field of biomonitoring (oral**

presentation)

Pilliere F., France

10.15

Application of biological monitoring for exposure assessment following chemical incidents. A procedure for decision-making

Scheepers P.T., Bos P.M., Konings J., Janssen N.A., Grievink L., Netherlands

10:30

Coffee / tea break (30 min)

Roundtable discussion:

The future role of biomonitoring in chemicals management

11.00

Opening remarks:

State-of-the-art biological monitoring in risk assessment

Maurizio Manno, Italy

Opening remarks:

Will biomonitoring play a role in future chemical risk management?

Tiina Santonen, Finland

11.30

Discussion (1 h 30 min)

Closing plenary

Tiina Santonen, Mia Latta, Finland (15 min)

13.15

Lunch